

EPOXY

_____ Name

_____ Date

also called... diglycidyl ether of bisphenol A, Bisphenol A, DGEBA epoxy resin, phenol novolate epoxy resin, Bisphenol F, or epichlorohydrin.

What is it?

Epoxy resins are man-made chemicals for producing glues and plastics. Usually they require two parts—a monomer unit that becomes cross-linked when a hardener is added. For most epoxies, epichlorohydrin is mixed with bisphenol A. Once it is hardened, epoxy is less likely to produce allergy. Sometimes, however, cured resin retains uncured molecules that produce a reaction.

Where might it be found?

Adhesives, glues, sealers
Aircraft assembly, adhesives
Anticorrosion protection (e.g. oil drilling platform)
Appliance primers, finishes
Artist, potter, sculptor materials
Auto tool and dye casting
Automobile plastics, primers
Bikes
Boat varnish, protective coats
Bookbinding
Bottle caps
Cabinetmaking
Can and drum linings
Cement waterproofing
Circuit board assembly
Coil coatings
Concrete crack filler
Construction work
Dental bonding agents
Electric encapsulators, motors
Electrical condensers, devices
Electrical insulation, tape
Electron microscopy prep
Eyeglass frames
Fiberglass manufacture, repair
Fiberoptic assembly
Film cassettes
Fishing rod manufacture
Flooring material, glue, sealer
Golf clubs, golf balls
Handbags, purses
Hemodialysis equipment, cath
Hockey stick assembly

“Jelly” shoes
Laminates, plastic molding
Medical lab adhesive
Metal corrosion protection
Microscopy immersion oil
Nail polish
Nasal cannula
Pacemakers
Paints, printing inks
Plastic bracelets, necklaces, panties, shoes
Plasticizer, industrial
Protective coating, e.g. tent fabric, knee patch
PVC products
Shoemaking, bonded leather
Ski, ski pole, snowboard manufacture
Surface coatings, e.g. bridges
Synthetic asphalt
Tennis racket manufacture
Textile flame retardant
Vinyl gloves
Wall & floor protective coating
Waterproofing
Wind turbine rotor blade production

How to avoid it:

If possible, substitute a non-epoxy resin glue, high molecular weight epoxy adhesive, or one-bag epoxy product that mixes in the package. Do not touch uncured epoxy. To protect your hands from epoxy, wear **4H/Silvershield Gloves** (www.allerderm.com 800-365-6868 or www.northsafety.com 800-430-4110) or **Barrier Chemical Protective Gloves** (www.ansellpro.com 800-800-0444). Avoid breathing epoxy fumes. Warn your dentist you are allergic to epoxy resin!